

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of

WT Docket No. 10-4

Amendment of Parts 1, 2, 22, 24, 27, 90 and
95 of the Commission's Rules to Improve
Wireless Coverage Through the Use of Signal
Boosters

REPLY COMMENTS OF PUBLIC SAFETY LICENSEES

The Metropolitan Washington Airports Authority ("MWAA"), the City of Cambridge, Massachusetts, the Maryland Counties of Anne Arundel and Montgomery, and the Virginia Counties of Arlington and Fairfax, together with the City of Ontario, California, hereby reply to the comments of others in the captioned Notice of Proposed Rulemaking ("NPRM").¹ All respondents are 800 MHz public safety radio licensees and all deploy one or more of the types of signal boosters discussed in the NPRM. Several have adopted ordinances or practices calling for adequate in-building signal levels to aid reliable public safety response.²

In their opening Comments, the Public Safety Licensees argued against license-by-rule for Part 90 public safety frequencies. Two of the commenters, MWAA and Montgomery County, explained why limiting Class B signal boosters to confined spaces was not tolerable for them.

We find little if any support for allowing boosters on public safety channels without prior consent of the licensee. The Verizon Wireless-Wilson Electronics Joint Proposal for a tripartite

¹ FCC 11-53, released April 6, 2011, WT Docket No. 10-4.

² These were excerpted at Exhibit A of the Public Safety Licensees' opening Comments of July 25, 2011, with the exception of Ontario's ordinance summarized in the Attachment to this Reply.

regulatory scheme to cover consumer installations, professionally-installed “certified” boosters and carrier installations would not apply to Part 90 bands until after 800 MHz rebanding is completed, if then.³

The record is mixed on placement of Class B signal boosters. Motorola and APCO believe their use in unconfined spaces should be phased out, while Bird Technologies and Jack Daniel, among others, argue to the contrary. Neither MWAA nor Montgomery is persuaded to change the original recommendation (at 4) that “deployment of Class B BDAs in unconfined spaces should be presumed acceptable absent interference traceable to these units.”

Similarly, Ontario favors continued Class B BDA usage in unconfined areas. There are two BDA’s at Ontario International Airport (“OIA”) that are Class B devices. These are used to fill in coverage of the drive-up area in front of Terminals 2 and 4. Never have these devices caused interference to other radio systems, commercial or private.

Certain cellular sites due north of the airport might otherwise have encountered interference from these devices, but the City has avoided this by limiting the BDA power to a minimal amount and focusing antenna energy into the immediate area of the drive-up. The successful experience at OIA over the last 10 years proves that the knowledgeable business or public safety end user can adequately manage the interference potential of Class B devices.

On the other hand, consumer boosters can be more problematic. Recently, the City encountered harmful interference to its 800 MHz radio system when someone’s self-installed, residential cell phone booster went into oscillation due to lack of antenna separation. The unit then produced energy that was received by base stations located about 1.25 miles away. The interference caused problems for public safety portable radio users. Ultimately, the City located the device, and the homeowner was cooperative in turning the system off.

³ Letter of July 25, 2011 from Verizon Wireless and Wilson Electronics.

The City would support some type of registration program that keeps track of the location of the devices, as even a well-designed device can fail and cause harmful interference. With GPS technology and low-cost cellular infrastructure, maybe the device could be engineered to communicate its location automatically back into the cellular network for identification purposes.

For the reasons given above and in their opening Comments, the Public Safety Licensees urge the Commission not to permit boosters on Part 90 frequencies under license-by-rule, and to continue to allow Class B BDAs in unconfined spaces absent interference to other licensed users.

Respectfully submitted,

PUBLIC SAFETY LICENSEES

By: /s/ James R. Hobson

James R. Hobson
Best Best & Krieger LLP
1155 Connecticut Avenue, N.W., Suite 1000
Washington, DC 20036
(202) 785-0600

August 24, 2011

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO,
CALIFORNIA, AMENDING SECTION 4-11.09 OF CHAPTER 11 OF TITLE 4 OF THE
ONTARIO MUNICIPAL CODE REGARDING RADIO AMPLIFICATION SYSTEMS**

THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, DOES ORDAIN AS
FOLLOWS:

SECTION 1: Section 4-11.09 (n) of the Ontario Municipal Code is hereby added as
follows:

"(n) Public Safety 800 MHZ Radio Amplification System.

(1) Except as otherwise provided in this section, no person shall construct or develop any commercial or industrial building or structure or any part thereof or cause the same to be done which fails to support adequate radio coverage for City emergency service workers, including, but not limited to, firefighters and police officers. For purposes of this section, adequate radio coverage shall include all of the following:

(i) a minimum signal strength of one (1) microvolt available in 85% of the area of each floor of the building when transmitted from the City of Ontario Communications Systems;

(ii) a minimum signal strength of one (1) microvolt available at the City of Ontario Communications Systems when transmitted from 85 % of the area of each floor of the building;

(iii) the frequency range which must be supported shall be 806 MHZ to 824 MHZ and 850 MHZ to 869 MHZ, and the frequency range which must be rejected shall be 824 MHZ to 849 MHZ and 869 MHZ to 894 MHZ; (iv) a 90% reliability factor.

(2) Testing Procedures

(i) Initial tests will be performed by the City of Ontario employees in accordance with City regulations, A Certificate of Occupancy shall not be issued for any structure if the building fails to comply with this section.

(ii) Annual tests will be conducted by the Ontario Fire Department in conjunction with inspection procedures.

(iii) In addition to the initial and annual tests, City Police and Fire

Personnel, after obtaining consent from the owner or his representative, or absent such consent, after obtaining other lawful authority, shall have the right to enter onto the property to conduct field testing to be certain the required level of radio coverage is present.

(3) Amplification Systems Allowed. Buildings and structures which cannot support the required level of radio coverage shall be equipped with any of the following in order to achieve the required adequate radio coverage:

(i) a radiating cable system; or

(ii) an internal multiple antenna system with FCC type-accepted bidirectional 800 MHz amplifiers.

If any part of the installed system or systems contains an electrically powered component, the system shall be capable of operating on an independent battery and/or generator system for a period of at least twelve (12) hours without external power input. The battery system shall automatically charge in the presence of an external power input.

Any person who constructs or develops a commercial or industrial building or structure shall provide two (2) inch raceways in the walls into which the cable could be laid. Such raceways shall include an opening in the roof which allows for placement of an exterior antenna and access to each floor.

(4) Exemptions. This section shall not apply to the following buildings provided they do not make use of any metal construction or any underground storage or parking areas:

(i) buildings permitted in R1 and R2 zones;

(ii) any building constructed of wood frame;

(iii) any building 30 feet high or less.

For purposes of this section, parking structures are included in the definition of "all parts of a building" but elevators may be excluded.